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PACKET TRANSFER APPARATUS

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ABSTRACT OF THE DISCLOSURE

A packet transfer apparatus switches and transfers
cell or frame signals. The apparatus efficiently routes
10   cell or frame signals that are made from packet data
based on Internet protocols. The apparatus has a switch
for making a connection path among a first node, a second
node, and a routing device, a memory for storing outgoing
route data, and a shortcut controller. The shortcut
15   controller monitors outgoing route data contained in a
cell or frame signal coming from the routing device,
stores the outgoing route data in the memory, checks an
input cell or frame signal to see if outgoing route data
contained in the input cell or frame signal is equal to
20   the outgoing route data stored in the memory, and if they
are equal to each other, controls the switch to form a
shortcut between the first node through which the input
cell or frame signal has been received and the second
node from which the input cell or frame signal is going
25   to be sent out and transfers the input cell or frame
signal from the first node to the second node through the
shortcut.